

01/31/02  
J1064 U.S. PTO

02-05-02

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Please type a plus sign (+) inside this box → ☐

PTO/SB/05 (11-00)  
Approved for use through 10/31/2002. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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# UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No. 728-230 (YOR9-2002-0024US1)  
First Inventor Louis L. Hsu  
Title Embedded DRAM System Having Wide Data...  
Express Mail Label No. EV035531786US

01/31/02  
10/062972  
J1064 U.S. PTO

## APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

- ☒ Fee Transmittal Form (e.g., PTO/SB/17)  
(Submit an original and a duplicate for fee processing)
- ☐ Applicant claims small entity status.  
See 37 CFR 1.27.
- ☒ Specification [Total Pages 36]  
(preferred arrangement set forth below)
  - Descriptive title of the invention
  - Cross Reference to Related Applications
  - Statement Regarding Fed sponsored R & D
  - Reference to sequence listing, a table, or a computer program listing appendix
  - Background of the Invention
  - Brief Summary of the Invention
  - Brief Description of the Drawings (if filed)
  - Detailed Description
  - Claim(s)
  - Abstract of the Disclosure
- ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets 11]
- ☐ Oath or Declaration [Total Pages]
  - ☐ Newly executed (original or copy)
  - ☐ Copy from a prior application (37 CFR 1.63 (d))  
(for continuation/divisional with Box 18 completed)
  - ☐ **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
- ☒ Application Data Sheet. See 37 CFR 1.76

ADDRESS TO: Assistant Commissioner for Patents  
Box Patent Application  
Washington, DC 20231

- ☐ CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)
- Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)
  - ☐ Computer Readable Form (CRF)
  - Specification Sequence Listing on:
    - ☐ CD-ROM or CD-R (2 copies); or
    - ☐ paper
  - ☐ Statements verifying identity of above copies

## ACCOMPANYING APPLICATION PARTS

- ☐ Assignment Papers (cover sheet & document(s))
- ☐ 37 CFR 3.73(b) Statement (when there is an assignee) ☒ Power of Attorney
- ☐ English Translation Document (if applicable)
- ☐ Information Disclosure Statement (IDS)/PTO-1449 ☐ Copies of IDS Citations
- ☐ Preliminary Amendment
- ☒ Return Receipt Postcard (MPEP 503)  
(Should be specifically itemized)
- ☐ Certified Copy of Priority Document(s)  
(if foreign priority is claimed)
- ☐ Request and Certification under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.
- ☐ Other: .....

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP)

of prior application No.: .....

Prior application information:

Examiner .....

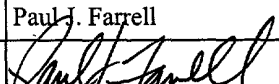
Group Art Unit: .....

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation, or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

## 19. CORRESPONDENCE ADDRESS

☐ Customer Number or Bar Code Label (Insert Customer No. or Attach bar code label here) or ☐ Correspondence address below

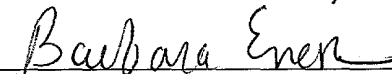
Name	Paul J. Farrell, Esq.				
Address	DILWORTH & BARRESE, LLP				
	333 Earle Ovington Blvd.				
City	Uniondale	State	New York	Zip Code	11553
Country	U.S.A.	Telephone	(516) 228-8484	Fax	(516) 228-8516

Name (Print/Type)	Paul J. Farrell	Registration No. (Attorney/Agent)	33,494
Signature		Date	01/31/02

CERTIFICATION UNDER 37 C.F.R. § 1.10

I hereby certify that this correspondence and the documents referred to as enclosed are being deposited with the United States Postal Service on date below in an envelope as "Express Mail Post Office to Addressee" Mail Label Number EV035531786US addressed to: Assistant Commissioner for Patents, Box Patent Application, Washington, D.C. 20231.

Dated: January 31, 2002

  
Barbara Evers

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**FEE TRANSMITTAL**  
**for FY 2002**

Patent fees are subject to annual revision.

**TOTAL AMOUNT OF PAYMENT** (\$ ) 884.00**Complete if Known**

Application Number	
Filing Date	Herewith
First Named Inventor	Louis L. HSU
Examiner Name	
Group Art Unit	
Attorney Docket No.	728-230 (YOR9-2002-0024 US1)

**METHOD OF PAYMENT (check one)**

- 1.
- ☒
- The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:

Deposit Account Number **50-0510/IBM (Yorktown Heights)**Deposit Account Name **IBM (Yorktown Heights)**

- ☒
- Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17

☐ Applicant claims small entity status. See 37 CFR 1.27

- 2.
- ☐
- Payment Enclosed:**

☐ Check ☐ Credit card ☐ Money Order ☐ Other**FEE CALCULATION****1. BASIC FILING FEE**

	Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
101	740	201 370	Utility filing fee	\$740.00
106	330	206 165	Design filing fee	
107	510	207 255	Plant filing fee	
108	740	208 370	Reissue filing fee	
114	160	214 80	Provisional filing fee	
<b>SUBTOTAL (1)</b>				<b>(\$ ) 740.00</b>

**2. EXTRA CLAIM FEES**

	Total Claims	Extra Claims	Fee from below	Fee Paid
Independent Claims	28	-20** = 8	X \$18 =	\$144
Multiple Dependent	3	-3** = 0	X \$84 =	\$0
			<b>\$280</b>	<b>= 0</b>

\*\*or number previously paid, if greater; For Reissues, see below.

	Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description
103	18	203 9	Claims in excess of 20
102	84	202 42	Independent claims in excess of 3
104	280	204 140	Multiple dependent claim, if not paid
109	84	209 42	** Reissue independent claims over original patent
110	18	210 9	** Reissue claims in excess of 20 and over original patent

**SUBTOTAL (2)** (\$ ) 144.00**FEE CALCULATION (continued)****3. ADDITIONAL FEES**

	Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
105	130	205 65	Surcharge - late filing fee or oath	
127	50	227 25	Surcharge - late provisional filing fee or cover sheet	
139	130	139 130	Non-English specification	
147	2,520	147 2,520	For filing a request for ex parte reexamination	
112	920*	112 920*	Requesting publication of SIR prior to Examiner action	
113	1,840*	113 1,840*	Requesting publication of SIR after Examiner action	
115	110	215 55	Extension for reply within first month	
116	400	216 200	Extension for reply within second month	
117	920	217 460	Extension for reply within third month	
118	1,440	218 720	Extension for reply within fourth month	
128	1,960	228 980	Extension for reply within fifth month	
119	320	219 160	Notice of Appeal	
120	320	220 160	Filing a brief in support of an appeal	
121	280	221 140	Request for oral hearing	
138	1,510	138 1,510	Petition to institute a public use proceeding	
140	110	240 55	Petition to revive - unavoidable	
141	1,280	241 640	Petition to revive - unintentional	
142	1,280	242 640	Utility issue fee (or reissue)	
143	460	243 230	Design issue fee	
144	620	244 310	Plant issue fee	
122	130	122 130	Petitions to the Commissioner	
123	50	123 50	Processing fee under 37 CFR 1.17(q)	
126	180	126 180	Submission of Information Disclosure Stmt	
581	40	581 40	Recording each patent assignment per property (times number of properties)	
146	740	246 370	Filing a submission after final rejection (37 CFR § 1.129(a))	
149	740	249 370	For each additional invention to be examined (37 CFR § 1.129(b))	
179	740	279 370	Request for Continued Examination (RCE)	
169	900	169 900	Request for expedited examination of a design application	

Other fee (specify) \_\_\_\_\_

\* Reduced by Basic Filing Fee Paid

**SUBTOTAL (3)** (\$ )**SUBMITTED BY**

Name (Print/Type)	Paul J. Farrell	Registration No. (Attorney/Agent)	33,494	Telephone	(516) 228-8484
Signature		Date	01/31/02		

**Complete (if applicable)****CERTIFICATION UNDER 37 C.F.R. § 1.10**

I hereby certify that this correspondence and the documents referred to as enclosed are being deposited with the United States Postal Service on date below in an envelope as "Express Mail Post Office to Addressee" Mail Label Number EV035531786US addressed to: Assistant Commissioner for Patents, Box Patent Application, Washington, D.C. 20231.

Dated: January 31, 2002

  
Barbara Evers

Assistant Commissioner for Patents  
Washington, D.C. 20231  
Sir:

ATTORNEY DOCKET NO. 728-230 (YOR9-2002-0024 US1)

Date: January 31, 2002  
Express Mail Label: EV035531786US  
Date of Deposit: January 31, 2002

Transmitted herewith for filing is the Patent Application of:

Inventors: **Louis L. Hsu, Rajiv V. Joshi, Jeremy K. Stephens and Daniel W. Storaska**

For: **EMBEDDED DRAM SYSTEM HAVING WIDE DATA BANDWIDTH AND DATA TRANSFER DATA PROTOCOL**

Enclosed are: ☒ 27 sheets of specification; ☒ 1 sheet(s) of Abstract;  
☒ 8 sheet(s) of claims; ☒ 11 sheet(s) of drawing(s);

- ☐ An assignment of the invention to International Business Machines Corporation with Recordation Form.
- ☐ Declaration and Power of Attorney.
- ☐ A certified copy of a \_\_\_\_\_ application, from which priority under Title 35 USC §119 is claimed.
- ☒ Associate Power of Attorney.
- ☐ Information Disclosure Statement with copies of cited art and PTO-1449.

The filing fee has been calculated as shown below:

	(Col. 1)	(Col. 2)
FOR:	NO. FILED	NO. EXTRA
BASIC FEE		
TOTAL CLAIMS	28 -20 =	8
INDEP CLAIMS	3 -3 =	0
MULTIPLE DEPENDENT CLAIMS PRESENTED		

OTHER THAN A  
SMALL ENTITY

RATE	FEE
	\$ 740.00
X \$18 =	144.00
X \$84 =	0.00
+ 270 =	
TOTAL	\$884.00

If the difference in Col. 1 is less than zero, enter "0" in Col. 2.

- ☐ A check in the amount of \$ \_\_\_\_\_ to cover the ☐ filing fee(s) and a check to cover the ☐ recording fee are enclosed.
- ☒ Please charge my Deposit Account No. 50-0510 in the amount of \$884.00.
- ☒ The Commissioner is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. 50-0510/IBM (Yorktown Heights). A duplicate copy of this sheet is enclosed.
- ☒ Any additional filing fees required under 37 CFR 1.16.
- ☒ Any patent application processing fees under 35 CFR 1.17.

Respectfully submitted,

By:

Paul J. Farrell  
Paul J. Farrell, Esq.  
Registration No. 33,494

Please address all  
correspondence to:

DILWORTH & BARRESE, LLP  
333 Earle Ovington Boulevard  
Uniondale, NY 11553  
Tel: (516) 228-8484  
Fax: (516) 228-8516

Attorney for:  
IBM Corporation  
Intellectual Property Law Dept.  
P.O. Box 218  
Yorktown Heights, NY 10598

**CERTIFICATION UNDER 37 C.F.R. § 1.10**

I hereby certify that this New Application Transmittal and the documents referred to as enclosed therein are being deposited with the United States Postal Service on this date January 31, 2002 in an envelope as "Express Mail Post Office to Addressee" Mail Label Number EV035531786US addressed to: BOX PATENT APPLICATION, Assistant Commissioner for Patents, Box PATENT APPLICATION, Washington, D.C. 20231.

Barbara Evers  
Barbara Evers

**PATENT**

Atty. Docket No. YOR9-2002-0024US1 (728-230)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Assistant Commissioner for Patents  
Washington, D.C. 20231  
Attn: Box Patent Application

**UTILITY APPLICATION DATA SHEET UNDER 37 C.F.R. §1.76**

Sir:

Transmitted herewith for filing is the patent application of

Inventor(s): Louis L. Hsu, Rajiv V. Joshi, Jeremy K. Stephens and Daniel W. Storaska

For: **EMBEDDED DRAM SYSTEM HAVING WIDE DATA  
BANDWIDTH AND DATA TRANSFER DATA PROTOCOL**

Enclosed are:

- ☒ 27 page(s) of specification
- ☒ 1 page(s) of Abstract
- ☒ 8 page(s) of claims
- ☒ 11 sheets of drawings [ ] formal [x] informal
- [ ]      page(s) of Declaration and Power of Attorney
- ☒ 1 page(s) Associate Power of Attorney
- [ ]      page(s) Assignment of Invention

Assignee Name: International Business Machines Corporation  
Assignee Resident: Armonk, New York

**CERTIFICATION UNDER 37 C.F.R. § 1.10**

I hereby certify that this New Application Transmittal and the documents referred to as enclosed therein are being deposited with the United States Postal Service on this date January 31, 2002 in an envelope as "Express Mail Post Office to Addressee" Mail Label Number EV035531786US addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231.

Barbara Evers

(Type or print name of person mailing paper)

*Barbara Evers*

(Signature of person mailing paper)

- ☐ This application claims the benefit under 35 U.S.C. §119(e) of U.S. Provisional Application(s) No(s):

APPLICATION NO(S):

FILING DATE

1

- ☐ Certified copy of applications

Country

Appln. No.

Filed

from which priority under Title 35 United States Code, § 119 is claimed

☐ is enclosed.


☐ will follow.

- ☒ Address all future correspondence to:

**Paul J. Farrell, Esq.  
Dilworth & Barrese, LLP  
333 Earle Ovington Blvd.  
Uniondale, New York 11553  
(516) 228-8484**

Date: January 31, 2002

**DILWORTH & BARRESE, LLP  
333 Earle Ovington Blvd.  
Uniondale, NY 11553  
Tel. No. (516) 228-8484  
Fax. (516) 228-8516**

  
\_\_\_\_\_  
Paul J. Farrell, Esq.  
Reg. No. 33,494  
Attorneys for Applicant(s)